

REMARKS

Applicants have received and carefully reviewed the Office Action mailed September 23, 2003. Claims 1, 2, 5-8, 10-13 were rejected. Claims 9, 14, and 15 were objected to, but were indicated to be allowable if rewritten in independent form. Claims 1 and 2 have been amended to further define the invention. Claims 1, 2, 5-15 are pending. Reconsideration and allowance of all pending claims are respectfully requested.

Claims 1, 2, and 11-13 were rejected under 35 U.S.C. §102(b) as being anticipated by *Ninomiya et al.*, U.S. Patent No. 3,891,374. After carefully reviewing the Examiner's arguments and the cited reference, Applicants respectfully disagree.

Claim 1 has been amended to recite rotating the polymer member "without allowing the polymer temperature to drop below the polymer glass transition temperature." The amendment is supported by the present disclosure at page 6, lines 16-24.

Claim 2 has also been amended. Applicants respectfully assert that these amendments do not claim new matter over the original claims. Specifically, the added element to claim 2, "without heating the elongate polymer member between the extruding step and rotating step" is shown at least at Figure 1 and at page 3, lines 19-23. In light of this amendment, Applicants respectfully traverse the rejection on several grounds.

With respect to both claim 1 and claim 2, the cited reference does not disclose the claimed invention. The cited reference uses a two-part process to impart oblique orientation to tubular film. The first process part includes forming a tubular film between a fixed annular die and mandrel and cooling the film to solidify it (1:61-65). One requirement in this first step is that the tubular film be cooled and solidified as quickly as possible (2:44-46). The second process part includes reheating the tubular film to render it stretchable and rotating a mandrel

about the film (1:65-2:4). Another requirement is that after passage of the fixed mandrel, the film is heated to a stretchable temperature, since the film in the vicinity of the fixed mandrel is in the solidified state (2:51-54). The invention of claim 1 includes maintaining the temperature above the glass transition. The invention of claim 2 forms a helically orientated elongate polymer member without heating the elongate polymer member between the extruding step and rotating step. Thus, the cited reference does not disclose either claimed invention.

The cited reference teaches away from the claimed invention. The cited reference states that the inventors first thought to maintain the annular die in a fixed state and rotate the mandrel and film such that the film could be stretched with torsion between the annular die and the mandrel to impart an oblique orientation (1:39-46). However, it was found that this concept could not be materialized with good results (1:46-47). The cited reference concluded that it was impossible to impart molecular orientation in an oblique direction by rotating the film immediately after extrusion (1:48-60).

In contrast to the cited reference, Applicants' claims require that molecular helical orientation is imparted to the elongate polymer member while the member is still in its molten state, as recited in claim 1, and without heating the elongate polymer member between the extruding step and the rotating step, as recited in claim 2. The cited reference concludes this is impossible and requires their film to be first cooled and then reheated prior to rotation. Thus, the cited reference actually teaches away from the claimed invention. Applicants request reconsideration and withdrawal of the rejection. As claims 11-13 depend from claim 2, Applicants traverse the rejection of these claims for the above reasons, and because they recite further elements.

Claims 5-8 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Ninomiya et al.*, U.S. Patent No. 3,891,374. After carefully reviewing the Examiner's arguments and the cited reference, Applicants respectfully disagree.

Applicants assert that claim 5-8 and 10 are patentable over the cited reference for at least the reasons discussed above. Applicants request reconsideration and withdrawal of the rejection.

Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

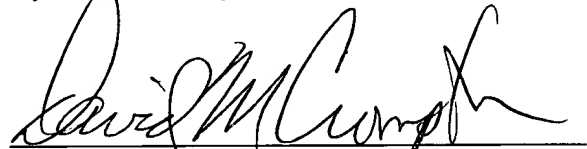
Respectfully submitted,

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By their Attorney,

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